

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
OASBIO.002C2APPLICATION NO.  
10/621,009INFORMATION DISCLOSURE STATEMENT  
BY APPLICANTAPPLICANT  
Bob D. BrownFILING DATE  
July 15, 2003GROUP  
Not Assigned

(USE SEVERAL SHEETS IF NECESSARY)

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
gy	1	4,458,066	07/03/84	Caruthers et al.			
	2	4,683,194	07/28/87	Saiki et al.			
	3	5,104,792	04/14/92	Silver et al.			
	4	5,112,974	05/12/92	Barton			
	5	5,223,618	06/29/93	Cook et al.			
	6	5,378,825	01/03/95	Cook et al.			
gy	7	5,424,413	06/13/95	Hogan et al.			
	8	5,438,131	08/01/95	Bergstrom et al.			
	9	5,451,503	09/19/95	Hogan et al.			
	10	5,489,677	02/06/96	Sanghvi et al.			
	11	5,539,082	07/23/96	Nielsen et al.			
	12	5,541,307	07/30/96	Cook et al.			
	13	5,571,902	11/05/96	Ravikumar et al.			
	14	5,571,903	11/05/96	Gryaznov			
	15	5,583,032	12/10/96	Torrence et al.			
	16	5,612,199	03/18/97	Western et al.			
	17	5,612,215	03/18/97	Draper et al.			
	18	5,627,032	05/06/97	Ulanovsky			
	19	5,650,271	07/22/97	Richards			
	20	5,677,289	10/14/97	Torrence et al.			
	21	5,681,702	10/28/97	Collins et al.			
	22	5,681,947	10/28/97	Bergstrom et al.			
	23	5,683,879	11/04/97	Laney et al.			
	24	5,686,242	11/11/97	Bruice et al.			
	25	5,700,922	12/23/97	Cook			
	26	5,719,271	02/17/98	Cook et al.			
	27	5,728,818	03/17/98	Wincott et al.			
	28	5,780,233	07/14/98	Guo et al.			
	29	5,780,610	07/14/98	Collins et al.			
	30	5,840,845	11/24/98	Smith et al.			

EXAMINER

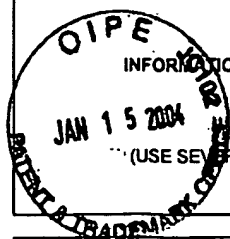
G. Goldberg

DATE CONSIDERED

8/22/05

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	31	5,843,650	12/01/98	Segev			
	32	5,877,162	03/02/99	Werner et al.			
	33	5,942,657	08/24/99	Bird et al.			
	34	5,952,202	09/14/99	Aoyagi et al.			
	35	5,968,748	10/19/99	Bennett et al.			
	36	5,981,179	11/09/99	Lorinez et al.			
	37	6,025,130	02/15/00	Thomas et al.			
	38	6,027,893	02/22/00	Ørum et al.			
	39	6,037,130	03/14/00	Tyagi et al.			
	40	6,084,102	07/04/00	Kutyavin et al.			
	41	6,133,031	10/17/00	Monia et al.			
	42	6,150,141	11/21/00	Jarrell			
	43	6,159,694	12/12/00	Karras			
	44	6,194,158	02/27/01	Kroes et al.			
	45	6,201,107	03/13/01	Lap-Chee et al.			
	46	6,228,642	05/08/01	Baker et al.			
	47	6,232,079	05/15/01	Wittwer et al.			
	48	6,232,462	03/15/01	Collins et al.			
	49	6,346,614	02/12/02	Metelev et al.			
	50	6,361,940	03/26/02	Van Ness et al.			

## FOREIGN PATENT DOCUMENTS

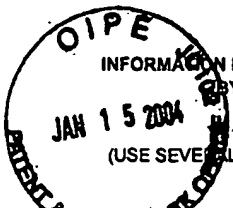
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	51	WO 89/02921	04/06/89	Patent Cooperation Treaty				
	52	WO 91/15601	10/17/91	Patent Cooperation Treaty				
	53	WO 93/05175	03/18/93	Patent Cooperation Treaty				
	54	WO 93/05176	03/18/93	Patent Cooperation Treaty				
	55	WO 93/23551	11/25/93	Patent Cooperation Treaty				
	56	WO 96/32474	10/17/96	Patent Cooperation Treaty				


EXAMINER

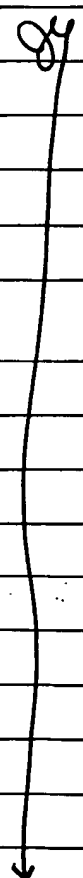
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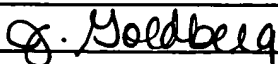
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	57	WO 97/28177	08/07/97	Patent Cooperation Treaty				
	58	WO 97/38097	10/16/97	Patent Cooperation Treaty				
	59	WO 97/46711	12/11/97	Patent Cooperation Treaty				
	60	WO 99/13886	03/25/99	Patent Cooperation Treaty				
	61	WO 99/18238	04/15/99	Patent Cooperation Treaty				
	62	WO 00/61810	10/19/00	Patent Cooperation Treaty				

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
	63	Chemical Abstracts and Indexes, American Chemical Society, Columbus, US, XP000376987, ISSN: 0009-2258, (1990).
	64	Amosova et al. "Effect of the 1-(2'-deoxy-Beta-D-ribofuranosyl)-3-Nitropyrrole Residue on the Stability of DNA Duplexes and Triplexes," <i>Nucleic Acids Research</i> , 25(10):1930-1934 (1997).
	65	Benseler et al., "Hammerhead-like Molecules Containing NonNucleotide Linkers are Active RNA Catalysts," <i>J. Am. Chem. Soc.</i> , 115:8483-8484, (1993).
	66	Bergstrom et al., "Synthesis, Structure, and Deoxyribonucleic Acid Sequencing with a Universal Nucoeside: 1-(2'-Deoxy-β-D-Ribofuranosyl)-3-nitropyrrole," <i>J. Am. Chem. Soc.</i> , 117:1201-1209 (1995).
	67	Blommers et al. "Effects of the Introduction of L-Nucleotides into DNA. Solution Structure of the Heterochiral Duplex d(G-C-G-(L)T-G-C-G) d(C-G-C-A-C-G-C) Studied by NMR Spectroscopy," <i>Biochemistry</i> , 33:1886-1896 (1994).
	68	Bolufer et al. "Rapid Quantative Detection of BCR-ABL transcripts in chronic myeloid leukemia patients by real-time reverse transcriptase polymerase-chain reaction using fluorescently labeled probes," <i>Haematologica</i> , 85(12):1248-1254 (2000).
	69	Brown et al., "Synthesis and duplex stability of oligonucleotides containing adenine-guanine analogues," <i>Carbohydrate Res</i> , 216:129-139 (1991).
	70	Chen et al., "Synthesis of Oligodeoxyribonucleotide N3'-P5' Phosphoramidates," <i>Nucleic Acids Research</i> , 23(14):2661-2668 (1995).
	71	Chiang et al., "Antisense oligonucleotides inhibit intercellular adhesion molecule 1 expression by two distinct mechanisms," <i>J. Biol. Chem.</i> , 266(27):18162-18171 (1991).
	72	Devaney et al. "Genotyping of two mutations in the HFE gene using single-base extension and high-performance liquid chromatography," <i>Anal. Chem.</i> , 73(3): 620-624 (2001).
	73	Donohue et al., "Rapid single-tube screening of the C282Y hemochromatosis mutation by real-time multiplex allele-specific PCR without fluorescent probes," <i>Clinical Chemistry</i> , 46(10):1540-1547 (2000).
	74	Dueholm et al., "Synthesis of Peptide Nucleic Acid Monomers Containing the Four Natural Nucleobases: Thymine, Cytosine, Adenine, and Guanine and their Oligomerization," <i>J Org. Chem.</i> , 59:5767-5773 (1994).
	75	Eritja et al., "Synthesis and properties of defined DNA oligomers containing base mispairs involving 2-aminopurine," <i>Nucleic Acids Research</i> , 14(14):5869-5884 (1986).
	76	Frutos et al. "Method for Detection of Singel-Base Mismatches Using Bimolecular Beacons," <i>J. Am. Chem. Soc.</i> , 124(11):2396-2397 (Received for publication 10/16/01) Published 2/26/2002.
	77	Guttridge et al. "Population Screening for Hemochromatosis by PCR Using Sequence-Specific Primers," <i>Genetic Testing</i> , 4(2):111-114 (2000).
	78	Hartmann et al., "Specific suppression of human tumor necrosis factor-α synthesis by antisense oligodeoxynucleotides," <i>Antisense and Nucleic Acid Drug Development</i> , 6:291-299 (1996).

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JG	79	Heim et al., "Highly sensitive detection of gene expression of an intronless gene: amplification of mRNA, but not genomic DNA by nucleic acid sequence based amplification (NASBA)," <i>Nucleic Acids Research</i> , 26(9):2250-2251 (1998).
	80	Hendry et al. "Using Linkers to Investigate the Spatial Separation of the Conserved Nucleotides A9 and G12 in the Hammerhead Ribozyme," <i>Biochimica et Biophysica Acta</i> , 1219(2):405-412 (1994).
	81	Izant and Weintraub, "Inhibition of thymidine kinase gene expression by anti-sense RNA: a molecular approach to genetic analysis," <i>Cell</i> , 36:1007-1015 (1984).
	82	Krupp G., "Antisense Oligoribonucleotides and RNase P. A Great Potential," <i>Biochimie</i> 75(1/2):135-139 (1993).
	83	Kunitsyn et al. "Stabilizing Effect of 5-Nitroindole (Universal Base) on DNA Duplexes Immobilized on Gel Matrix," <i>J. of Biomolec. Structure and Dynamics</i> , 15(3):597-603 (1997).
	84	Lieber et al. "Selection of Efficient Cleavage Sites in Target RNAs by Using a Ribozyme Expression Library," <i>Molecule and Cellular Biology</i> , 15(1):540-551 (1995).
	85	Lin and Brown, "Synthesis and duplex stability of oligonucleotides containing cytosine-thymine analogues," <i>Nucleic Acids Research</i> , 17(24):10373-10383 (1989).
	86	Lin and Brown, "Synthesis of oligodeoxyribonucleotides containing degenerate bases and their use as primers in the polymerase chain reaction," <i>Nucleic Acids Research</i> , 20(19):5149-5152 (1992).
	87	Lizardi et al., "Mutation detection and single-molecule counting using isothermal rolling-circle amplification," <i>Nature Genet.</i> , 19:225-232 (1998).
	88	Loakes, "3-Nitropyrrole and 5-Nitroindole as Universal Bases in Primers for DNA Sequencing and PCR," <i>Nucleic Acids Research</i> , 23(13):2361-2366 (1995).
	89	Ma et al., "Nuclease-resistant external guide sequence-induced cleavage of target RNA by human ribonuclease P," <i>Antisense and Nucleic Acid Drug Development</i> , 8:415-426 (1998).
	90	McCurdy et al., "An Improved Method for the Synthesis of N3'-P5' Phosphoramidate Oligonucleotides," <i>Tetrahedron Lett</i> , 38(2):207-210 (1997).
	91	Medintz et al. "High speed single nucleotide polymorphism typing of a hereditary haemochromatosis mutation with capillary array electrophoresis microplates," <i>Electrophoresis</i> , 21:2352-2358 (2000).
	92	Milligan et al. "Current Concepts in Antisense Drug Design" <i>J. Medicinal Chemistry</i> , 36(14):1923-1937 (1993).
	93	Morvan et al., "Oligonucleotide Mimics for Antisense Therapeutics: Solution Phase and Automated Solid-Support Synthesis of MMI Linked Oligomers," <i>J Am Chem Soc</i> , 118:255-256 (1996).
	94	Mueller et al., "Self-sustained sequence replication (3SR): an alternative to PCR," <i>Histochem. Cell Biol.</i> , 108:431-437 (1997).
JG	95	Nelson et al., "N3'-P5' Oligodeoxyribonucleotide Phosphoramidates: A New Method of Synthesis Based on a Phosphoramidite Amine-Exchange Reaction," <i>J. Org. Chem.</i> , 62:7278-7287 (1997).
	96	Nichols et al., "A Universal Nucleoside for Use at Ambiguous Sites in DNA Primers" <i>Nature</i> , 369:492-493 (1994).
	97	Perbost et al., "Synthesis of 5'-O-Amino-2'-deoxypyrimidine and Purine Nucleosides: Building Blocks for Antisense Oligonucleotides," <i>J. Org. Chem.</i> , 60:5150-5156 (1995).
	98	Pierce et al. "Construction of a Directed Hammerhead Ribozyme Library: Towards the Identification of Optimal Target Sites for Antisense-Mediated Gene Inhibition," <i>Nucleic Acids Research</i> , 26(22):5093-5101 (1998).
	99	Pitsch et al., "Why Pentose and Not Hexose-Nucleic Acids?" <i>Helv Chimica Acta</i> , 76:2161-2183 (1993).
	100	Press, R., "Detection of Prevalent Genetic Alterations Predisposing to Hemochromatosis and Other Common Human Diseases," <i>Clinical Chem.</i> 46:1526-1527 (2000).
	101	Restagno et al. "A Pilot C282Y Hemochromatosis Screening in Italian Newborns by TaqMan (TM) Technology," <i>Genetic Testing</i> , 4(2):177-181 (2000).
	102	Reynolds et al. "Antisense Oligonucleotides Containing an Internal, Non-nucleotide-based Linker Promote Site-Specific Cleavage of RNA," <i>Nucleic Acids Research</i> , 24(4):760-765 (1996).
	103	Romano et al., "NASBA technology: isothermal RNA amplification in qualitative and quantitative diagnostics," <i>Immunol. Invest.</i> , 26:15-28 (1997).
	104	Spargo et al., "Detection of <i>M. tuberculosis</i> DNA using thermophilic strand displacement amplification," <i>Mol. Cell Probes</i> , 10:247-256 (1996).

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105	Swayze et al., "The Synthesis of N,N'-O-Trisubstituted Hydroxylamines via a Mild Reductive Alkylation Procedure: An Improved Synthesis of the MMI Backbone," <i>Synlett</i> , pp. 859-861 (1997).	
106	Van Aerschot et al. "An Acyclic 5-Nitroindazole Nucleoside Analogue as Ambiguous Nucleoside," <i>Nucleic Acids Research</i> , 23(21):4363-4370 (1995).	
107	Walker, "Empirical aspects of strand displacement amplification," <i>PCR Methods Applications</i> , 3:1-6 (1993).	
108	Zhong and Kallenbach, "Conformation and Thermodynamics of DNA 'Necks' Models for Three-arm Branch Formation in a Duplex," <i>J. Mol. Biol.</i> , 230:766-778 (1993).	
109	Zhong et al., "Effects of Unpaired Bases on the Conformation and Stability of Three-Arm DNA Junctions," <i>Biochemistry</i> , 33:3660-3667 (1994).	

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EXAMINER	<i>G. Nordberg</i>	DATE CONSIDERED	<i>8/22/05</i>
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